



TORQ Analysis of Industrial Machinery Mechanics to Electric Motor, Power Tool, and Related Repairers

INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Industrial Machinery Mechanics	49-9041.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Electric Motor, Power Tool, and Related Repairers	49-2092.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

OUTPUT SECTION:

Grand TORQ:

94

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	94	Level	95	Level	93

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Finger Dexterity	59	8	75	Critical Thinking	61	4	71	No Knowledge Upgrades Required!			
Depth Perception	50	8	53	Troubleshooting	71	1	83				
Category Flexibility	44	3	50								
Manual Dexterity	55	2	68								
Arm-Hand Steadiness	50	2	62								
Inductive Reasoning	44	2	59								
Near Vision	51	1	62								
Selective Attention	51	1	56								

LEVEL and IMPT (IMPORTANCE) refer to the Target Electric Motor, Power Tool, and Related Repairers. GAP refers to level difference between Industrial Machinery Mechanics and Electric Motor, Power Tool, and Related Repairers.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Industrial Machinery Mechanics	Electric Motor, Power Tool, and Related Repairers	Importance
Finger Dexterity	51	59	75
Manual Dexterity	53	55	68



Problem Sensitivity	44	42	65
Information Ordering	53	48	62
Arm-Hand Steadiness	48	50	62
Near Vision	50	51	62
Inductive Reasoning	42	44	59
Visualization	51	50	59
Visual Color Discrimination	53	53	59
Deductive Reasoning	46	46	56
Selective Attention	50	51	56
Reaction Time	59	48	56
Hearing Sensitivity	55	48	56
Speed of Closure	41	41	53
Control Precision	55	55	53
Far Vision	44	42	53
Depth Perception	42	50	53
Oral Comprehension	50	50	50
Written Comprehension	48	48	50
Oral Expression	44	44	50
Category Flexibility	41	44	50
Flexibility of Closure	41	39	50
Multilimb Coordination	51	41	50
Rate Control	41	37	50
Auditory Attention	55	53	50
Speech Recognition	37	37	50
Speech Clarity	39	35	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Industrial Machinery Mechanics	Electric Motor, Power Tool, and Related Repairers	Importance
Repairing	74	71	84
Troubleshooting	70	71	83
Equipment Selection	67	67	82
Installation	73	71	80
Equipment Maintenance	73	64	80
Critical Thinking	57	61	71

Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Industrial Machinery Mechanics	Electric Motor, Power Tool, and Related Repairers	Importance
Mechanical	81	70	86



Experience & Education Comparison

Related Work Experience Comparison				Required Education Level Comparison			
Description		Industrial Machinery Mechanics	Electric Motor, Power Tool, and Related Repairers	Description		Industrial Machinery Mechanics	Electric Motor, Power Tool, and Related Repairers
10+ years		7%	<div><div></div></div> 0%	Doctoral		0%	0%
8-10 years		8%	<div><div></div></div> 0%	Professional Degree		0%	0%
6-8 years		8%	<div><div></div></div> 0%	Post-Masters Cert		0%	0%
4-6 years		14%	<div><div></div></div> 21%	Master's Degree		0%	0%
2-4 years		17%	<div><div></div></div> 28%	Post-Bachelor Cert		0%	0%
1-2 years		15%	<div><div></div></div> 16%	Bachelors		7%	0%
6-12 months		3%	<div><div></div></div> 9%	AA or Equiv		1%	6%
3-6 months		13%	<div><div></div></div> 0%	Some College		11%	0%
1-3 months		0%	<div><div></div></div> 2%	Post-Secondary Certificate		36%	39%
0-1 month		0%	<div><div></div></div> 2%	High School Diploma or GED		24%	43%
None		11%	<div><div></div></div> 18%	No HSD or GED		17%	10%
Industrial Machinery Mechanics				Electric Motor, Power Tool, and Related Repairers			
Most Common Educational/Training Requirement:							
Long-term on-the-job training				Postsecondary vocational award			
Job Zone Comparison							
3 - Job Zone Three: Medium Preparation Needed				3 - Job Zone Three: Medium Preparation Needed			
Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.				Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.			
Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.				Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.			
Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.				Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.			

Tasks

Industrial Machinery Mechanics	Electric Motor, Power Tool, and Related Repairers
Core Tasks	Core Tasks
Generalized Work Activities:	Generalized Work Activities:
<ul style="list-style-type: none"> Repairing and Maintaining Mechanical Equipment - Servicing, repairing, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily on the basis of mechanical (not electronic) principles. Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects. Handling and Moving Objects - Using hands and arms in handling, installing, 	<ul style="list-style-type: none"> Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources. Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events. Repairing and Maintaining Mechanical Equipment - Servicing, repairing, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily on the basis of



performing and moving materials, and manipulating things.

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.

Specific Tasks

Occupation Specific Tasks:

- Analyze test results, machine error messages, and information obtained from operators in order to diagnose equipment problems.
- Clean, lubricate, and adjust parts, equipment, and machinery.
- Cut and weld metal to repair broken metal parts, fabricate new parts, and assemble new equipment.
- Demonstrate equipment functions and features to machine operators.
- Disassemble machinery and equipment to remove parts and make repairs.
- Enter codes and instructions to program computer-controlled machinery.
- Examine parts for defects such as breakage and excessive wear.
- Observe and test the operation of machinery and equipment in order to diagnose malfunctions, using voltmeters and other testing devices.
- Operate newly repaired machinery and equipment to verify the adequacy of repairs.
- Reassemble equipment after completion of inspections, testing, or repairs.
- Record parts and materials used, and order or requisition new parts and materials as necessary.
- Record repairs and maintenance performed.
- Repair and maintain the operating condition of industrial production and processing machinery and equipment.
- Repair and replace broken or malfunctioning components of machinery and equipment.
- Study blueprints and manufacturers' manuals to determine correct installation and operation of machinery.

Detailed Tasks

mechanical (not electronic) principles.

- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.

Specific Tasks

Occupation Specific Tasks:

- Add water or acid to battery cell solutions to obtain specified concentrations.
- Adjust working parts, such as fan belts, contacts, and springs, using hand tools and gauges.
- Assemble electrical parts such as alternators, generators, starting devices, and switches, following schematic drawings and using hand, machine, and power tools.
- Bolt porcelain insulators to wood parts in order to assemble hot stools.
- Clean cells, cell assemblies, glassware, leads, electrical connections, and battery poles, using scrapers, steam, water, emery cloths, power grinders, or acid.
- Clean, rinse, and dry transformer cases, using boiling water, scrapers, solvents, hoses, and cloths.
- Cut and form insulation, and insert insulation into armature, rotor, or stator slots.
- Disassemble defective equipment so that repairs can be made, using hand tools.
- Drain and filter transformer oil and refill transformers with oil until coils are submerged.
- Hammer out dents and twists in tools and equipment.
- Inspect and test equipment in order to locate damage or worn parts and diagnose malfunctions, or read work orders or schematic drawings to determine required repairs.
- Inspect batteries for structural defects such as dented cans, damaged carbon rods and terminals, and defective seals.
- Inspect electrical connections, wiring, relays, charging resistance boxes, and storage batteries, following wiring diagrams.
- Lift units or parts such as motors or generators, using cranes or chain hoists, or signal crane operators to lift heavy



Detailed Work Activities:

- adhere to safety procedures
- adjust or set mechanical controls or components
- adjust production equipment/machinery setup
- align or adjust clearances of mechanical components or parts
- analyze operation of malfunctioning electrical or electronic equipment
- apply cleaning solvents
- assemble and install pipe sections, fittings, or plumbing fixtures
- assemble, dismantle, or reassemble equipment or machinery
- bend tubing or conduit
- braze metal parts or components together
- calibrate or adjust electronic equipment or instruments to specification
- conduct performance testing
- conduct tests to locate mechanical system malfunction
- control HVAC equipment
- coordinate production maintenance activities
- cut, bend, or thread pipe for gas, air, hydraulic, or water lines
- determine installation, service, or repair needed
- develop maintenance schedules
- diagnose mechanical problems in machinery or equipment
- fabricate, assemble, or disassemble manufactured products by hand
- identify base metals for welding
- identify properties of metals for repair or fabrication activities
- inspect machinery or equipment to determine adjustments or repairs needed
- install electrical conduit or tubing
- install electrical fixtures or components
- install electronic equipment, components, or systems
- install electronic power, communication, control, or security equipment or systems
- install equipment or attachments on machinery or related structures
- install industrial machinery or related heavy equipment
- install or replace meters, regulators, or related measuring or control devices
- install water or sewer treatment plant equipment
- install/connect electrical equipment to power circuit
- lubricate machinery, equipment, or parts
- maintain or repair industrial or related or signal crane operators to lift heavy parts or subassemblies.
- Lubricate moving parts.
- Maintain stocks of parts.
- Measure velocity, horsepower, revolutions per minute (rpm), amperage, circuitry, and voltage of units or parts to diagnose problems, using ammeters, voltmeters, wattmeters, and other testing devices.
- Position and level battery cells, anodes, or cathodes, using hoists or leveling jacks, or signal other workers to perform positioning and leveling.
- Pour compounds into transformer-case terminal openings in order to seal out moisture.
- Read service guides to find information needed to perform repairs.
- Reassemble repaired electric motors to specified requirements and ratings, using hand tools and electrical meters.
- Record repairs required, parts used, and labor time.
- Reface, ream, and polish commutators and machine parts to specified tolerances, using machine tools.
- Remove and replace defective parts such as coil leads, carbon brushes, and wires, using soldering equipment.
- Repair and operate battery-charging equipment.
- Repair and rebuild defective mechanical parts in electric motors, generators, and related equipment, using hand tools and power tools.
- Rewind coils on cores in slots, or make replacement coils, using coil-winding machines.
- Rewire electrical systems, and repair or replace electrical accessories.
- Scrape and clean units or parts, using cleaning solvents and equipment such as buffing wheels.
- Seal joints with putty, mortar, and asbestos, using putty extruders and knives.
- Set machinery for proper performance, using computers.
- Sharpen tools such as saws, picks, shovels, screwdrivers, and scoops, either manually or by using bench grinders and emery wheels.
- Solder, wrap, and coat wires to ensure proper insulation.
- Steam-clean polishing and buffing wheels to remove abrasives and bonding materials, and spray, brush, or recoat surfaces as necessary.
- Test battery charges, and replace or recharge batteries as necessary.
- Test conditions, fluid levels, and specific gravities of electrolyte cells, using voltmeters, hydrometers, and



equipment/machinery

- maintain or repair small engines
- maintain or repair work tools or equipment
- maintain repair records
- maintain specialized manufacturing or commercial equipment or machinery
- maintain welding machines or equipment
- move or fit heavy objects
- observe or listen to machinery or equipment operation to detect malfunctions
- obtain information from individuals
- operate crane in construction, manufacturing or repair setting
- operate hoist, winch, or hydraulic boom
- operate pneumatic test equipment
- order or purchase supplies, materials, or equipment
- overhaul industrial or construction machinery or equipment
- overhaul power-generating equipment or machinery
- perform detailed welding techniques
- perform hydraulic plumbing
- perform safety inspections in industrial, manufacturing or repair setting
- position, align, or level machines, equipment, or structures
- program computer numerical controlled machines
- read blueprints
- read schematics
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- repair computer controlled manufacturing systems
- repair or adjust measuring or control devices
- repair or replace electrical wiring, circuits, fixtures, or equipment
- repair or replace malfunctioning or worn mechanical components
- repair plastics manufacturing equipment
- repair sheet metal products
- replace electronic components
- requisition stock, materials, supplies or equipment
- set up and operate variety of machine tools
- set up computer numerical control machines
- solder electrical or electronic connections or components
- solder metal parts or components together
- test electrical/electronic wiring,

thermometers.

- Test equipment for overheating, using speed gauges and thermometers.
- Verify and adjust alignments and dimensions of parts, using gauges and tracing lathes.
- Weld, braze, or solder electrical connections.

Detailed Tasks

Detailed Work Activities:

- apply cleaning solvents
- assemble gear systems
- clean equipment or machinery
- determine installation, service, or repair needed
- distinguish colors
- fabricate, assemble, or disassemble manufactured products by hand
- inspect machinery or equipment to determine adjustments or repairs needed
- inspect transformer for defects
- install or replace meters, regulators, or related measuring or control devices
- install/connect electrical equipment to power circuit
- lubricate machinery, equipment, or parts
- maintain inventory of supplies
- maintain or repair industrial or related equipment/machinery
- maintain or repair work tools or equipment
- maintain production or work records
- move or fit heavy objects
- operate coil winding machines
- operate hoist, winch, or hydraulic boom
- operate lathes
- perform safety inspections in industrial, manufacturing or repair setting
- read blueprints
- read schematics
- read technical drawings
- read work order, instructions, formulas, or processing charts
- repair electrical transformers
- repair or replace electrical wiring, circuits, fixtures, or equipment
- service batteries or transformers with specified fluids
- sharpen metal objects
- signal directions or warnings to coworkers
- solder electrical or electronic connections or components
- solder metal parts or components together
- test electrical/electronic wiring, equipment, systems or fixtures
- test mechanical products or equipment



- equipment, systems or fixtures
- test electronic or electrical circuit connections
- test mechanical products or equipment
- understand service or repair manuals
- understand technical operating, service or repair manuals
- use 2-cycle engine technology
- use acetylene welding/cutting torch
- use arc welding equipment
- use basic plumbing techniques
- use braze-welding equipment
- use combination welding procedures
- use control or regulating devices to adjust or maintain industrial machinery
- use electrical or electronic test devices or equipment
- use electronic calibration devices
- use hand or power tools
- use high voltage apparatus
- use knowledge of metric system
- use knowledge of welding filler rod types
- use machine tools in installation, maintenance, or repair
- use pipe fitting equipment
- use pneumatic tools
- use pollution control techniques
- use precision measuring devices in mechanical repair work
- use pressure gauges
- use robotics systems technology
- use soldering equipment
- use tube bending equipment
- verify levelness or verticality, using level or plumb bob
- weld together metal parts, components, or structures

Technology - Examples

Computer aided design CAD software

- Computer aided design CAD software

Computer aided manufacturing CAM software

- Extranet Machine Tools Suite

Data base user interface and query software

- Maintenance planning and control software

Facilities management software

- Maintenance management software

Industrial control software

- BIT Corp ProMACS PLC

- KEYENCE PLC Ladder Logic

- understand service or repair manuals
- understand technical operating, service or repair manuals
- use electrical or electronic test devices or equipment
- use hand or power tools
- use high voltage apparatus
- use measuring devices in repairing industrial or heavy equipment
- use pneumatic tools
- use precision measuring devices in mechanical repair work
- use soldering equipment
- use voltmeter, ammeter, or ohmmeter

Technology - Examples



Office suite software

- Microsoft Office

Spreadsheet software

- Microsoft Excel

Word processing software

- Microsoft Word

Tools - Examples

- Pliers
- Wrenches
- Compressors
- Alignment tools
- Ammeters
- Stud drivers
- Bandsaws
- Vises
- Block and tackle equipment
- Acetylene torches
- Boring machines
- Broaching machines
- Calipers
- Reciprocating machinery combustion analyzers
- Airhammer chisels
- Combination wrenches
- Cutting dies
- Desktop computers
- Equipment rollers
- Side cutting pliers
- Angled feeler gauges
- Files
- Flow meters
- Forklifts
- Brazing equipment
- Shaping machines



- Grease guns
- Lapping wheels
- Brass hammers
- Hand pumps
- Gauges
- Allen wrenches
- Chain falls
- Impact wrenches
- Bearing heating ovens
- Jacks
- Ladders
- Laser measuring equipment
- Computer printers
- Engine lathes
- Transits
- Level gauges
- Channel lock pliers
- Magnetic retrievers
- Alignment scopes
- Rubber mallets
- Metal inert gas MIG welders
- Punches
- Programmable logic controllers PLC
- Inside micrometers
- Cutting machines
- Milling machines
- Multimeters
- Needlenose pliers
- Oscilloscopes
- Personal computers
- Facing machines
- Pipe wrenches



- Screw pitch gauges
- Plasma cutters
- Staging platforms
- Plumb bobs
- Airpowered descaling drills
- Pneumatic hammers
- Airpowered descaling turbines
- Jigs
- Power drills
- Cylindrical grinders
- Sanders
- Power saws
- Steam cleaning equipment
- Pressure gauges
- Hydrostatic testers
- Optical measuring equipment
- Pinchbars
- Hydraulic pullers
- Putty knives
- Ratchet sets
- Reamers
- Burnishing wheels
- Riveting machines
- Rulers
- Welding lenses
- Handsaws
- Scissor lifts
- Scrapers
- Phillips head screwdrivers
- Rigging
- Socket sets
- Soldering irons



- Cylindrical procedures squares
- Straightedges
- Bearing bridge gauges
- Vacuum lifts
- Strobe tachometers
- Tape measures
- Taps
- Space gauges
- Pipe threaders
- Aviation snips
- Emery wheels
- Tungsten inert gas TIG welding equipment
- Radial drills
- Utility knives
- Vacuum gauges
- Vibration analyzers
- Voltmeters
- Steel wedges
- Arc welders
- Welding shields
- Robotic teach pendants
- Tip dressing machines
- Electric welding equipment
- Electric rotary wire brushes
- Wire cutters
- Cranes
- Drill presses

Labor Market Comparison

Description	Industrial Machinery Mechanics	Electric Motor, Power Tool, and Related Repairers	Difference
Median Wage	\$ 39,370	\$ 31,210	\$ (8,160)



10th Percentile Wage	\$ 28,150	\$ 21,230	\$ (6,920)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 48,040	\$ 39,540	\$ (8,500)
90th Percentile Wage	\$ 56,740	\$ 46,250	\$ (10,490)
Mean Wage	\$ 40,830	\$ 32,930	\$ (7,900)
Total Employment - 2007	990	170	-820
Employment Base - 2006	1,021	153	-868
Projected Employment - 2016	1,096	135	-961
Projected Job Growth - 2006-2016	7.4 %	-11.8 %	-19.1 %
Projected Annual Openings - 2006-2016	25	6	-19

National Job Posting Trends

Trend for Industrial Machinery Mechanics

Trend for
Electric Motor,
Power Tool, and
Related Repairers



Data from [Indeed](http://Indeed.com)

Recommended Programs

Electrician

Electrician. A program that prepares individuals to apply technical knowledge and skills to install, operate, maintain, and repair electric apparatus and systems such as residential, commercial, and industrial electric-power wiring; and DC and AC motors, controls, and electrical distribution panels. Includes instruction in the principles of electronics and electrical systems, wiring, power transmission, safety, industrial and household appliances, job estimation, electrical testing and inspection, and applicable codes and standards.



Institution	Address	City	URL
Eastern Maine Community College	354 Hogan Rd	Bangor	www.emcc.edu
Washington County Community College	One College Drive	Calais	www.wccc.me.edu
Kennebec Valley Community College	92 Western Ave	Fairfield	www.kvcc.me.edu
Kennebec Valley Community College	92 Western Ave	Fairfield	www.kvcc.me.edu
Northern Maine Community College	33 Edgemont Dr	Presque Isle	www.nmcc.edu
Northern Maine Community College	33 Edgemont Dr	Presque Isle	www.nmcc.edu
Northern Maine Community College	33 Edgemont Dr	Presque Isle	www.nmcc.edu
Southern Maine Community College	2 Fort Road	South Portland	www.smccME.edu

Electrical and Electronics Equipment Installer and

Electrical/Electronics Equipment Installation and Repair, General. A program that generally prepares individuals to apply technical knowledge and skills to operate, maintain, and repair electrical and electronic equipment. Includes instruction in electrical circuitry, simple gearing, linkages and lubrication of machines and appliances, and the use of testing equipment.

No schools available for the program

Major Appliance Installer and Repairer

Appliance Installation and Repair Technology/Technician. A program that prepares individuals to apply technical knowledge and skills to repair, install, and service major gas, electric, and microwave consumer appliances such as stoves, refrigerators, dryers, water heaters, washers, dishwashers, and commercial units such as ice makers and coffee makers.

No schools available for the program

Electrical and Electronics Equipment Installer and

Electrical/Electronics Maintenance and Repair Technology, Other. Any instructional program in electrical and electronics equipment installation and repair not listed above.

No schools available for the program

Miscellaneous Mechanics and Repairers, Other

Precision Systems Maintenance and Repair Technologies, Other. Any instructional program in miscellaneous mechanics and repairers not listed above.

No schools available for the program

Maine Statewide Promotion Opportunities for Industrial Machinery Mechanics

O* NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
49-9041.00	Industrial Machinery Mechanics	100	3	990	\$39,370.00	\$0.00	7%	25
49-9044.00	Millwrights	92	3	830	\$41,280.00	\$1,910.00	-12%	11
51-4111.00	Tool and Die Makers	88	3	160	\$51,670.00	\$12,300.00	-11%	2
51-4041.00	Machinists	87	3	1,860	\$41,560.00	\$2,190.00	4%	35
49-2094.00	Electrical and Electronics Repairers, Commercial and Industrial Equipment	87	3	440	\$49,450.00	\$10,080.00	-19%	15
51-4192.00	Lay-Out Workers, Metal and Plastic	86	2	180	\$43,870.00	\$4,500.00	-24%	3



51-4011.00	Computer-Controlled Machine Tool Operators, Metal and Plastic	86	2	720	\$40,490.00	\$1,120.00	6%	12
47-4021.00	Elevator Installers and Repairers	85	4	0	\$50,960.00	\$11,590.00	0%	0
49-2095.00	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	85	5	20	\$60,790.00	\$21,420.00	5%	1
49-9012.00	Control and Valve Installers and Repairers, Except Mechanical Door	85	3	170	\$47,860.00	\$8,490.00	-9%	3
49-3011.00	Aircraft Mechanics and Service Technicians	84	3	210	\$44,280.00	\$4,910.00	-2%	2
53-6051.07	Transportation Vehicle, Equipment and Systems Inspectors, Except Aviation	83	3	60	\$42,890.00	\$3,520.00	5%	2
47-2111.00	Electricians	82	3	2,910	\$43,650.00	\$4,280.00	1%	89
53-7021.00	Crane and Tower Operators	81	3	240	\$41,940.00	\$2,570.00	-2%	4
17-3023.01	Electronics Engineering Technicians	81	3	430	\$45,180.00	\$5,810.00	-20%	9

Top Industries for Electric Motor, Power Tool, and Related Repairers

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance	811300	27.62%	7,037	6,702	-4.76%
Self-employed workers, primary job	000601	8.55%	2,178	2,088	-4.12%
Electrical and electronic goods merchant wholesalers	423600	7.99%	2,035	2,159	6.11%
Self-employed workers, secondary job	000602	3.96%	1,008	903	-10.40%
Building material and supplies dealers	444100	3.90%	994	1,143	15.01%
Electronic and precision equipment repair and maintenance	811200	2.84%	724	592	-18.20%
Automotive mechanical and electrical repair and maintenance	811110	2.78%	709	758	6.86%
Electrical contractors	238210	2.78%	709	669	-5.63%
Electrical equipment manufacturing	335300	1.74%	444	340	-23.53%



Hardware, and plumbing and heating equipment and supplies merchant wholesalers	423700	1.69%	430	439	2.17%
Converted paper product manufacturing	322200	1.48%	377	285	-24.47%
Personal and household goods repair and maintenance	811400	1.45%	369	308	-16.47%
Professional and commercial equipment and supplies merchant wholesalers	423400	1.29%	329	345	4.91%
Motor vehicle and motor vehicle parts and supplies merchant wholesalers	423100	1.23%	314	323	2.73%
Local government, excluding education and hospitals	939300	1.08%	275	278	1.10%

Top Industries for Industrial Machinery Mechanics

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance	811300	7.91%	20,611	25,083	21.70%
Motor vehicle parts manufacturing	336300	3.70%	9,644	8,829	-8.44%
Plastics product manufacturing	326100	3.58%	9,327	11,369	21.90%
Self-employed workers, primary job	000601	2.49%	6,497	7,960	22.52%
Electric power generation, transmission and distribution	221100	2.40%	6,265	6,626	5.77%
Converted paper product manufacturing	322200	2.30%	5,998	5,789	-3.49%
Pulp, paper, and paperboard mills	322100	2.25%	5,865	4,678	-20.23%
Animal slaughtering and processing	311600	2.25%	5,866	7,700	31.25%
Local government, excluding education and hospitals	939300	2.03%	5,296	6,841	29.19%
Fruit and vegetable preserving and specialty food manufacturing	311400	2.02%	5,259	5,484	4.27%
Basic chemical manufacturing	325100	1.87%	4,881	4,734	-3.02%
Federal government, excluding postal service	919999	1.81%	4,706	5,116	8.71%
Petroleum and coal products manufacturing	324100	1.46%	3,797	3,296	-13.18%
Semiconductor and other electronic component manufacturing	334400	1.39%	3,633	3,652	0.52%
Bakeries and tortilla manufacturing	311800	1.36%	3,536	4,154	17.47%